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09/236,897 01/26/99 KOMATSU

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EXAMINER

IM22/0223

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ART UNIT

PAPER NUMBER

1743

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/236,897

Applicant(s)  
Komatsu

Examiner  
LaToya Cross

Group Art Unit  
1743



☒ Responsive to communication(s) filed on Jan 26, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-8 is/are pending in the applicat

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-8 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1743

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4,296,069 to Smith et al (hereinafter Smith et al '069) in view of US Patent 4,053,381 to Hamblen et al (hereinafter Hamblen et al '381).

Smith et al '069 disclose an apparatus for processing analysis slides in a chemical analyzer. The apparatus comprises a meter device 18 for metering (spotting) sample fluid from sample cups on a sample tray onto an analysis slide of the colorimetric type. A second meter device is provided to deposit sample and reference fluid onto analysis slides of the potentiometer type (col. 3, lines 40-45). Incubators 22, 24 are provided to function with analysis means 23, 25 from measuring a change in the analysis slides as a result of the fluid being deposited thereon (col. 4, lines 40-45). Results from the analysis means 25 may be transmitted to a computer for appropriate calculations of concentration for various samples (col. 7, lines 53-58). Control circuits are provided which include thermistors for controlling the temperature of various heating elements (col. 4, lines 28-37). Also disclosed are housings 14, 16 where analysis slides are

Art Unit: 1743

supplied and moved between the incubator **24** and analysis means **25**, via a slide transfer mechanism **128**. The position of the analysis slide is detected by means of an optical sensor (col. 6, lines 33-36).

The chemical analyzer disclosed by Smith et al '069 does not contain ion-activity measuring means. However, Smith et al '069 does disclose that analyzers comprising a pair of electrodes selective to ion activity may be used (col. 3, lines 12-22). Hamblen et al '381 teach ion selective electrodes for determining ion activity in liquids. Hamblen et al '381 teach that the use of such ion-selective electrodes in chemical analysis helps to minimize errors in the readings obtained.

Thus, it would have been obvious to one of ordinary skill in the art to use ion-selective electrodes such as those disclosed by Hamblen et al '381 in the chemical analyzer apparatus of Smith et al '069 to help in obtaining more accurate readings for the analyses performed.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 USC 103 in view of the teachings of Smith et al '069 and Hamblen et al '381.

3. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al '069 and Hamblen et al '381 as applied to claims 1-3 and 5-7 above, and further in view of US Patent 5,814,277 to Bell et al '277 (hereinafter Bell et al '277).

Art Unit: 1743

With respect to claims 4 and 8, neither Smith et al '069 nor Hamblen et al '381 disclose Applicants' claimed feature of a diluting unit where the sample is diluted with a diluent.

Bell et al '277 teach an automatic chemical analyzer comprising sample and reagent containers 22, 24. Aliquots of sample and reagent are drawn up from the chambers and dispensed into test cells. Bell et al '277 disclose that the samples may be diluted automatically by dispensing buffer solution from reservoir 52 into the test cells. The automatic dilution of sample is disclosed as being advantageous when the sample concentration is too high or when limited amounts of sample are available for testing. Automated dilution also eliminates the potential for user error in sample dilution. See col. 9, lines 10-18.

Thus, it would have been obvious to one of ordinary skill in the art to include a dilution unit in the apparatus of Smith et al '069 to allow a greater number of assays to be performed and to reduce risk of user error in diluting the sample.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 USC 103 in view of the teachings of Smith et al '069, Hamblen et al '381 and Bell et al '277.

#### *Citation of Relevant Prior Art*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 1743

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is (703) 305-7360. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached at (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

LIC *SLC*  
February 8, 2001

*Jill Warden*  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700